

## CLAIMS

We claim:

1. A composition comprising a bioactive compound that increases a rate of fermentation of a microorganism, wherein the bioactive compound binds to a thaumatin-like protein.
2. The composition of claim 1 wherein the bioactive compound is prepared from a plant.
3. The composition of claim 2 wherein the plant is a *poaceae*.
4. The composition of claim 2 wherein the plant is *Hordeum vulgare*. *barley*
5. The composition of claim 3 wherein the plant is extracted using a protocol comprising at least one of a step of malting, a step of mashing, a step of anion exchange chromatography, and a step of ultra-filtration.
6. The composition of claim 3 wherein the plant is extracted using a protocol comprising at least one of a step of extraction of a barley preparation in a NaCl solution, and ethanol extraction.
7. The composition of claim 1 further comprising a tocol. *scope? not in spec vit E*
8. The composition of claim 1 wherein ~~the~~ the bioactive compound is synthetic.
9. *Sub B* The composition of claim 1 wherein the bioactive compound has a molecular weight of no more than 1000Da and has an UV absorption maximum of about 260nm.
10. The composition of claim 1 wherein the fermentation comprises utilization of a saccharide. *dnf1*
11. The composition of claim 1 wherein the microorganism is a yeast. *dnf1*
12. A composition comprising:  
a plant seed extract, wherein the plant seed is malted and the extract is prepared from the malted plant seed using a protocol that includes an aqueous extraction step; and *was + 102 all class*

wherein the extract increases a rate of fermentation in a microorganism when the extract is presented to the microorganism at a concentration effective to increase the rate of fermentation.

13. The composition of claim 12 wherein the plant seed is a *Hordeum vulgare* seed.
14. The composition of claim 12 wherein the malting is performed at a temperature between 30°C and 65°C.
15. The composition of claim 12 wherein the extraction step includes extraction with an aqueous buffer.
16. The composition of claim 12 wherein the extract has a molecular weight of no more than 1000 Da and has a UV absorption maximum at about 260nm.
17. A method of increasing a fermentation of a microorganism, comprising:
  - providing a bioactive compound that binds specifically to a thaumatin-like protein; and
  - presenting the bioactive compound to the microorganism in an amount effective to increase the fermentation of the microorganism.
18. The method of claim 17 wherein the fermentation comprises utilization of a monosaccharide.
19. The method of claim 17 wherein the microorganism is a yeast.
20. The method of claim 17 wherein the bioactive compound is prepared from *Hordeum vulgare* using a protocol comprising at least one of a step of malting, a step of mashing, a step of anion exchange chromatography, a step of salt extraction, a step of buffer extraction, and a step of ultrafiltration.